

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-142 (cancelled)

1 143. (Currently Amended) A functional engineered fluorescent protein whose
2 amino acid sequence is substantially identical to the amino acid sequence of *Aequorea* green
3 fluorescent protein (SEQ ID NO:2) and which differs from SEQ ID NO:2 by

- 4 i) comprising substitutions at T203Y; S65G; S72A; V68L; and H148Q or
5 H148G at least one first substitution at position T203, wherein the substitution
6 selected from the group consisting H, Y, W or F, and
7 ii) comprising at least one substitution selected from the group consisting of
8 Y66H, F, or W; Q69N or K; R96K; Q183N or K; and the substitutions listed in
9 Table F at least one second substitution of position H148, wherein said functional
10 engineered fluorescent protein has a different fluorescent property and improved
11 anion binding as compared to than *Aequorea* green fluorescent protein.

1 144. (original) The functional engineered fluorescent protein of claim 143,
2 wherein said at least one second substitution at position H148 is selected from the group
3 consisting of H148R, H148G, H148Q, H148A, H148N, and H148K.

1 145. (original) The functional engineered fluorescent protein of claim 144,
2 wherein said at least one second substitution at position H148 is H148Q.

1 146. (original) The functional engineered fluorescent protein of claim 144,
2 wherein said at least one second substitution at position H148 is H148G.

1 147. (cancelled)

1 148. (Currently Amended) The functional engineered fluorescent protein of
2 claim 143, wherein said functional engineered fluorescent protein ~~further comprises a at least one~~
3 ~~third~~-substitution at position V150.

1 149. (Currently Amended) The functional engineered fluorescent protein of
2 claim 148, wherein said ~~at least one third~~ substitution at position V150 is selected from the group
3 consisting of Q, S, T and N.

1 150. (Currently Amended) The functional engineered fluorescent protein of
2 claim 143, wherein said functional engineered fluorescent protein ~~further comprises a at least one~~
3 ~~third~~-substitution at position V163.

1 151. (Currently Amended) The functional engineered fluorescent protein of
2 claim 150, wherein said ~~at least one third~~ substitution at position V163 is selected from the group
3 consisting of Q, S, T and N.

1 152. (Currently Amended) The functional engineered fluorescent protein of
2 claim 143, wherein said functional engineered fluorescent protein ~~further comprises a at least one~~
3 ~~third~~-substitution at position Q69.

1 153. (Currently Amended) The functional engineered fluorescent protein of
2 claim 152, wherein said ~~at least one third~~ substitution at position Q69 is selected from the group
3 consisting of ~~N, S, T and V and K.~~

1 154-187 (cancelled).